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May 14, 2001

TO:

Internal File

FROM:

Peter H. Hess, Senior Reclamation Specialist, Team Lead

RE:

Midterm Permit Review, Canyon Fuel Company, LLC, Banning Siding Loadout,
C/007/034-MT01

SUMMARY:

A midterm permit review site visit was conducted on April 4, 2001 for the Banning Siding. Members of the Salt Lake City UDNR/OGM technical staff attended including Messrs. Daron Haddock, Permit Supervisor; Paul Baker, Senior Reclamation Specialist, Biology; Gregg Galecki, Reclamation Specialist, Hydrology; and Peter Hess, Reclamation Specialist III, mining engineer/inspector. Messrs. Dave Spillman, Manager of Technical Services, and Gary Taylor, Environmental/Mining Engineer, represented the permittee.

The following document consists of a compilation of the inspection report filed for the April 4, 2001 visit, and the concerns and comments of the Salt Lake City technical staff relative to hydrology, and biology as they relate to the R645 coal rules.

TECHNICAL ANALYSIS:

OPERATION PLAN

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

Analysis:

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Removal and Storage

The Banning Siding site was completed and brought into full operation in 1978. As most of the earthwork was completed prior to the passage of SMCRA in August of 1977, there was no topsoil salvaged for reclamation purposes.

Findings:

There are no topsoil piles in the Banning Siding permit area. These regulations are not applicable at this time.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

Ground-water monitoring

The Banning Siding has one ground water monitoring point that is sampled on an annual basis during the Third quarter. Traditionally, the sump has been pumped prior to collecting the sample. During the 2000 monitoring sample collection, a baler was used to extract the sample. The first water drawn from the sump was used for the sample and some distinct variability was encountered in the analysis. It is recommended, at a minimum, that multiple bales be lifted from the sump and the field parameters are allowed to stabilize prior to collection of the sample. An analytical review of the September 27, 2000 water sample from the truck dump sump (performed on November 17, 2000) revealed that the permittee did have all of the required analytical parameters analyzed.

During today's midterm permit review inspection, Mr. Galecki elaborated on the reporting of a -11.6% cation/anion balance for the November 17, 1997 truck dump sump water sample. Water samples pulled from this location for the years 1996, 1998, 1999, and 2000 all reported acceptable balances, i.e., less than 5% error. Mr. Galecki also mentioned that total iron and total manganese had not been run for the 1996, 1997, and 1998 samples.

The fact that the currently approved surface and ground water monitoring regimes for the Banning site (Chapter 7) are not specific about total and dissolved parameters was discussed.

It is Mr. Spillman's intent to submit a revised Chapter 7 to the Division for review.

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The permittee is not required to conduct water monitoring during the first quarter of the year. Operational parameters for the laboratory analytical process are listed in Table 3 of the mining and reclamation plan.

The water database currently lists four water monitoring points at the Banning site; two are UPDES outfalls. UPDES point #001 is the ground water monitoring point in the truck dump sump, which is pumped into the sediment pond rather than allowed to discharge to an unnamed tributary of Grassy Trail Creek. The permittee does this to eliminate the need to sample, and pay for laboratory analysis of that sample.

Discharge monitoring reports for the months of October, November, and December of 2000, as well as the report forms for January and February of 2001 were reviewed. There were no outfalls from the sediment pond during this period. All reports were submitted in a timely fashion.

Surface-water monitoring

The permittee is not required to conduct water monitoring during the first quarter of the year.

The other UPDES outfall listed in the water-monitoring database is UPDES point #002, which is the sediment pond outfall. This outfall has never discharged. A second surface monitoring sample point is named the "straw bales quantity." This sample, which is taken during a precipitation event, is grabbed as the flow reports through straw bales. The permittee questions the necessity of this sample, and does not consider the requirement to sample downstream of straw bales during a precipitation event (more than likely a thunder storm) in this flat lying area. Due to the potential for lightning strikes this is not a safe atmosphere. The permittee intends to request a deletion of this sample point from the surface water-monitoring regime via the permitting process.

Discharge monitoring reports for the months of October, November, and December of 2000, as well as the report forms for January and February of 2001 were reviewed. There were no outfalls from the sediment pond during this period. All reports were submitted in a timely fashion.

A surface water-monitoring site was eliminated with the removal of the straw bales from the primary access road. The site was never sampled due to 'No Flow' conditions. The original purpose of the sample was to monitor the sediment load leaving the ditch servicing the access road. The technical visit determined this was no longer necessary based on the vegetation existing within the ditch.

Other treatment facilities

The permittee submitted an amendment C/007/034-AM01A, Silt Fence Removal, to the Division that would allow the removal of several silt fences that had been installed along the primary coal haul access road to the site. In order to handle runoff from the road, a road grader

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bladed the out slopes of the haul road, removing the native vegetation in order to create the ditches to route the flows to the natural drainages. The permittee installed silt fences adjacent to the inlets and discharge ends of the road culverts to treat this runoff, prior to same reporting off the permit area. The silt fences have been in place for fourteen years, and several are to the point that maintenance is needed. As the Utah R645 coal mining rules do not require the treatment of road runoff, and the site is in a temporary cessation status, the permittee is desirous to remove the silt fences, rather than continuing to maintain them. Mr. Galecki is performing the review for the Division, and today's site visit was helpful in allowing him to formulate his determination. Banning sits in a very nearly flat area, immediately NE of the Mounds railroad junction. The area has been used for the rail transportation of coal since the early nineteenth century.

Relative to the silt fences along the primary haul road mentioned in topic 1, the inspection team was in concurrence that the fences could be removed, with the stipulation that, if erosion started to appear on the gradual slopes near the inlets and outlets of the road culverts, same would be corrected.

As the site is in temporary cessation, the permittee requested that the midterm review team evaluate several other silt fence locations in the disturbed area. These included the silt fences located adjacent to the border of ASCA Area #3 and ASCA Area #4 which were installed to prevent the transportation of coal fines off the permit area by surface flow. Due to the current status of the site, (i.e., temporary cessation), the permittee felt that it might be possible to remove this fence from duty, because there is, at present, no means to produce additional coal fines which would report to this area, (i.e., there is no coal stockpile contributing windborne coal fines to the ASCA's adjacent to the drainages located on the North side of the inbound truck road). The UDNR/OGM review team concluded that these silt fences should be left in place and maintained as needed, because sufficient coal remains on the stockpile pad area to continue to contribute to the transportation of fines off of the disturbed area.

The silt fences at the South end of ASCA Area #2 were also inspected. These fences were also installed to prevent surface flows from transporting coal fines off the permit area. The permittee's intent here was to remove these fences during the temporary cessation period at the site, and then reinstall them if the site should become active, at which time a storage pile would be built. The group felt again, that in general, there was still enough coal on the surface storage pad to generate wind borne fines into the low depressions where surface drainage could pick them up and transport them off the permit area, (i.e., an off-site impact). There are two fences here in series; one is in dire need of repair. The permittee agreed to replace the fabric on the fence that needed repair. It was felt that only one fence was needed in this area; hence the permittee was authorized to remove the fence on the east side.

A total of five Alternate Sediment Control Areas (ASCA's) and one Small Area Exemption (SAE) regulate the amount of sediment leaving the Disturbed Area of the permit. The site has been under temporary cessation as of March 7, 2000; this is felt to be a reason that would further reduce the amount of sediment leaving the site. The performance of all five ASCA's and the SAE were evaluated during the technical visit conducted on April 4, 2001, and a determination was made that all of the alternate sediment control areas were performing

adequately. Future amendments to the MRP will be submitted to eliminate silt fences from ASCA #1 and reduce the number of silt fences at ASCA #2 from two to one. The decision to eliminate the silt fences at ASCA #1 will be based on existing contours, established vegetation, and roughening of the surface. Extensive discussions at ASCA #2 were inconclusive to whether the elimination of all silt fences was possible. The consensus determined a minimum of one silt fence was required to control sediment leaving the disturbed area.

Ponds, Impoundments, Banks, Dams, and Embankments

The first quarter 2001 impoundment inspection was conducted by Mr. Jim Byers, engineering technician, on January 8, 2001. The Banning site only has one sediment pond, which is incised. There were no signs of instability, or other hazards noted by Mr. Byers during the permittee's inspection. The sediment level in the pond was reported as being well below the established sediment cleanout marker (approximately eight feet below the primary spillway discharge elevation).

The second quarter 2001 impoundment inspection was conducted on April 3, 2001 by Mr. Byers. There were no problems noted by either Mr. Byers on April 3, 2001, or by this individual on April 4, 2001 during the midterm permit review site inspection.

The sediment pond, covered under UPDES permit UTG040011-001, has never discharged. The bottom of the pond is near or at the water table, and abundant vegetation exists. The pond has never been cleaned, and is certified to be stable.

Findings:

Information provided in the MRP adequately addresses the requirements of the Ground Water Monitoring section of the regulations.

Information provided in the MRP adequately addresses the requirements of the Surface Water Monitoring section of the regulations.

The elimination of silt fences and straw bales from the ditch servicing the paved primary access road to the site was based on two principles (as discussed in Amendment AM01A): 1) the sediment load from the ditch is not adding additional sediment load outside the permit area; and 2) the ditch is adequately designed to serve as a form of sediment control.

Information provided in the MRP adequately addresses the requirements of the Other Treatment Facilities section of the regulations.

Information provided in the MRP adequately addresses the requirements of the Ponds, Impoundments, Banks, Dams, and Embankments section of the regulations.

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RECLAMATION PLAN

REVEGETATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

Analysis:

Standards for success

The test plots at the Banning Siding were started in November 1991 and were monitored through 1998. Because of extremely harsh soil and moisture conditions, the Division had been concerned with whether revegetation that was capable of meeting the performance standards was possible. The Division was anxious to show that any desirable species could be successfully established in this area. The test plots have shown that reclamation is feasible, and they have confirmed what treatments and species can be used at this site to meet revegetation success. Some of the conclusions from test plot monitoring and from subsequent revegetation near the substation include:

- The most successful species planted were Gardner saltbush (probably *Atriplex gardneri* Var. *tridentata*) and crested wheatgrass (*Agropyron desertorum*).
- The most successful treatment was to rip and gouge the surface then seed and mulch. None of the other treatments, such as applying manure, sawdust, or fertilizer, appeared to increase the amount of vegetation. The control areas that were simply gouged and mulched with no seed applied had little or no vegetation.

In about 1993, an area near the substation was gouged, seeded with Gardner saltbush and crested wheatgrass, and mulched. This revegetation effort has been successful and confirms the test plot results. This area may have been seeded too heavily which led to some of the plants being stunted.

Findings:

The Division is pleased with the results of the test plots showing that vegetation can be established. In the final reclamation process, it will be necessary for the permittee to try to establish greater diversity than what had been established within the test plots.

RECOMMENDATIONS:

Based on observations made during the April 4, 2001 midterm site visit by the UDNR/OGM Salt Lake technical staff, as well as the review of permit amendments relative to the various disciplines involved with the visit and their relevance with the mining and

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reclamation plan, it is felt that the Banning Siding site, and the mining and reclamation plan for same adequately meet the requirements of the R645 coal rules.

There are no outstanding permitting issues pending at this time.

There are no major or minor compliance issues pending at this time.

The midterm permit review for the Banning Siding has been completed.

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